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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/539,991

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Christian Riondet

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HOWARD & HOWARD ATTORNEYS PLLC  
450 West Fourth Street  
Royal Oak, MI 48067

EXAMINER

DUONG, THO V

ART UNIT

PAPER NUMBER

3744

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/539,991	<b>Applicant(s)</b> RIONDET ET AL.	
	<b>Examiner</b> Tho v. Duong	<b>Art Unit</b> 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 13-15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

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## **DETAILED ACTION**

### ***Claim Objections***

Claims 13-15 are objected to under 37 CFR 1.75(c) as being in improper form because multiple dependent claims 13-15 depend on other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims 13-15 have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 1, the claimed limitation of “to allow it” at line 7, renders the scope of the claim indefinite since it is not clear what applicant refers “it” to. Regarding claim 4, the claimed limitation of “it comprises fins” renders the scope of the claim indefinite since it is not clear what applicant refers “it” to.

Claim 6 recites the limitation “the cheeks” in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 7 recites the limitation “the cheeks” in line 2. There is insufficient antecedent basis for this limitation in the claim.

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant’s use.

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### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

### ***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoyhoff et al. (US 2003/0075307A1). Stoyhoff discloses (figures 1—1d, and paragraphs 33 and 46-47) a heat exchange module comprising at least a first and a second heat exchanger (12,30), each exchanger comprising fluid circulation tubes (14,32), generally flat, uniformly spaced, having a width; a heat exchanger fin consisting of a corrugated strip comprising a first heat exchange zone (16) and a second heat exchange zone (34); the strip comprises a zone (50,52) of weakness able to allow the fin to be parted into a first element (16) and a second element (34); the zone of weakness consists of a straight slot (50) interrupted at some of the faces of the corrugations by at least one residual link (52) provided between the first and second heat exchanger zone. Furthermore, basing on a geometrical relationship between a height (h) of the residual link (52) and a height (H) of the corrugated fin, Stoyhoff discloses (figure 1d) that a height (h) of the residual link (52) is between  $H/5$  and  $H/30$ . Moreover, applicant has not disclosed any criticality or any unexpected result for having the claimed range of the height of the residual link. It appears that the residual link would perform equally well with the height shown in Stoyhoff, which is able the link to be broken. Accordingly, the use of the claimed range of height of the residual link is deemed to be a design consideration which fails to patentable distinguish over the prior art of Stoyhoff.

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Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stoynoff in view of Sugimoto (US 6,408,939). Stoynoff substantially discloses all of applicant's claimed invention as discussed above except for the limitation that the tubes of the heat exchanger are offset from one another in a direction orthogonal to the tube and the cheeks have an equivalent offsetting level between the first and the second heat exchangers. Sugimoto discloses (figures 5-6) a heat exchange module that has side plates (300) including an equivalent offsetting level (301) between a first and a second heat exchangers (130,230) for a purpose of providing a rigid support for the first and second heat exchanger that have unequal heights. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Sugimoto's teaching in Stoynoff's device for a purpose of providing a rigid support for the first and second heat exchanger that have unequal height.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stoynoff in view of Sugimoto et al. (US 5,992,514). Stoynoff substantially discloses all of applicant's claimed invention as discussed above except for the limitation of two parts of the cheeks joined together by deformable links. Sugimoto discloses (figures 1-3) a heat exchange module has cheeks comprising of two parts (23 and 33), wherein the two parts (23,33) are joined together by a deformable links (4) for a purpose of joining the two parts (23,33) of the cheek into a single unit. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use Sugimoto's teaching in Stoynoff's device for a purpose of joining the two parts of the cheek into a single unit.

***Allowable Subject Matter***

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Claim 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ozaki et al. (US 6,213,196) discloses a double heat exchanger for vehicle air conditioner.

Kodumudi et al. (US 2002/0029869A1) discloses a side member for heat exchanger.

Ozaki et al. (US 2001/0022220A1) discloses a compound heat exchanger.

Iwasaki et al. (US 6,871,399) discloses a method for producing an integrated heat exchanger.

Ozaki et al. (US 6,662,861) discloses a heat exchanger.

Nishishita et al. (US 6,354,368) discloses a fin for one piece heat exchanger.

Hasegawa et al. (US 6,237,676) discloses a heat exchanger for vehicle air conditioner.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tho v. Duong whose telephone number is 571-272-4793. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tyler J. Cheryl can be reached on 571-272-4834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tho v Duong/  
Primary Examiner, Art Unit 3744